UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,716	02/10/2000	Kazuichi Ooe	1046.1209/JDH	4289

21171 7590 12/23/2008

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
TSEGAYE, SABA	

ART UNIT	PAPER NUMBER
2419	

MAIL DATE	DELIVERY MODE
12/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/501,716	OOE, KAZUICHI	
	Examiner	Art Unit	
	SABA TSEGAYE	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/25/08 has been entered.

2. Claims 12-22 are pending. Currently no claims are in condition for allowance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15, line 9, it is not clear whether "a communication data size" refers to the same communication data size cited in lines 6-7.

Line 10, the phrase "the other communication mode" lacks antecedent basis.

Line 11, the phrase "the other communication device" lacks antecedent basis.

Claim 18, line 12, it is not clear whether "a communication performance of the other communication mode" refers to the same communication performance cited in lines 8-9.

Line 13, it is not clearly whether "a communication condition" refers to the same communication condition cited in line 7.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 12, 13, 19, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Achour et al. (US 6,363,260 B1).

Regarding claim 12, Achour discloses, in Fig. 2, a communication method of performing communications between a communication device (160) and other communication device (162, 164, 168), the method comprising:

measuring performances of communication between the other communication device of different communication modes (cellular mode or AMPS mode), under a plurality of different communication conditions respectively (measuring the levels of the signals received and determining the quality of the communication channel [column 3, lines 51-56]);

determining, as threshold, (figs. 4 and 5, steps 304, 404) a communication condition that a communication performance of one or the communication modes (CDMA service provider; column 6, lines 61-column 7, line 8) exceeds a communication performance of other communication mode (AMPS mode) based on a result of the measurement (monitoring if a first

and a second performance levels exceed their respective thresholds and if the timer exceeds a predetermine duration [column 7, lines 52-54; column 9, lines 58-63]); and

selecting, depending on a communication condition (power RSSI), a communication mode (AMPS mode [second provider system]) that the communication performance exceeds the communication performance of the other communication mode (CDMA [a first provider system]) as an optimum communication mode to communicate with the other communication device (second provider system 168), based on the determination (column 1, line 61-column 2, line 6; column 7, lines 55-63; claims 1, 8 and 12).

Regarding claim 13, Achour discloses wherein the measuring of communication performances and the determining of the communication condition are performed for each communication device, when the communication device communicates with a plurality of the other communication devices (see fig. 2; claim 1).

Regarding claim 19, Achour discloses, in Figs. 1 and 12, a method for optimizing communication condition of a communication between other communication devices (see Fig. 2), the method comprising:

communicating, on a communicating line, with the other communication device in both a first communication mode (CDMA) and in a second communication mode (AMPS) that is different from the first communication mode, under a plurality of different communication conditions (pilot signal strength (Ec/Io) and pilot received power (RSSI)) respectively;

measuring a communication performance in the first communication mode and a communication performance in the second communication mode under each of the communication conditions (measuring the levels of the signals received and determining the quality of the communication channel [column 3, lines 51-56]; see figs. 4 and 5; claims 1 and 8);

determining a communication condition in which a communication performance of the first communication mode exceeds a communication performance of the second communication mode (monitoring if a first and a second performance levels exceed their respective thresholds and if the timer exceeds a predetermine duration [column 7, lines 52-54; column 9, lines 58-63]); and

selecting, among the first communication mode and the second communication mode, a communication mode for communicating with the other communication device that the communication performance exceeds that of the other communication mode, corresponding to communication condition (column 1, line 61-column 2, line 6; column 7, lines 55-63; claims 1, 8 and 12).

Regarding claim 21, Achour discloses further comprising:

storing the determined communication condition, as a threshold, for each of the other communication devices, and referring to the stored threshold when selecting the communication mode to communicate with the other communication device (a list of preferred service provider systems is dept in a preferred roaming list. Roaming list is a list of frequencies and bands used in different parts of the country; see abstract; column 7, line 55-column 8, line12).

Regarding claim 22, Achour discloses further comprising:

storing a relationship between a communication condition and a communication mode to be applied for a communication with the other communication device; wherein when selecting a communication mode, referring to the stored relation ship and determining a communication mode that corresponding to a certain communication condition (a list of preferred service provider systems is dept in a preferred roaming list. Roaming list is a list of frequencies and bands used in different parts of the country; see abstract; column 7, line 55-column 8, line12).

7. Claims 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto et al. (US 6,640,115 B1).

Regarding claims 12 and 19, Fujimoto discloses a communication method of performing communications between a communication device and other communication device (column 2, lines 37-45), the method comprising:

measuring performances of communication between the other communication device of different communication modes (normal communication mode; radio communication mode), under a plurality of different communication conditions respectively (high speed);

determining, as threshold, a communication condition that a communication performance of one or the communication modes exceeds a communication performance of other communication mode based on a result of the measurement (column 2, line 63-column 3, line 11); and

selecting, depending on a communication condition (high speed), a communication mode (normal mode, radio communication mode) that the communication performance exceeds the

communication performance of the other communication mode as an optimum communication mode to communicate with the other communication device, based on the determination (column 16, line 30-column 17, line 25).

Regarding claim 13, Fujimoto discloses wherein the measuring of communication performances and the determining of the communication condition are performed for each communication device, when the communication device communicates with a plurality of the other communication devices column 16, line 30-column 17, line 25).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 14, 15, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Achour et al. in view of Vembu (US 6,259,928 B1).

Regarding claims 14, 15, 20, Achour discloses all the claim limitations as stated above; except for the communication condition is a size of data.

Vembu teaches determining system performance based number of frame (size of data) received with errors or on the number of errors in the received signal. (see Fig. 3, steps 308, 312; column 10, lines 1-6).

It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate size of data, such as that suggested by Vembu, to determining

communication condition disclosed by Achour. One of ordinary skill in the art would have been motivated to do this because the size of data allows the receiver to know if a packet fails to transmit, or if the packets get transmitted out of sequence.

Regarding claim 18, Achour discloses all the claim limitations as stated above, except for a computer readable medium.

However, Achour discloses, in fig. 1, a device 106 that includes memory 104 operated by a CPU. Therefor, it would have been obvious to one ordinary skill in the art at the time the invention was made to use computer readable medium. The benefit using computer-readable medium is that programs can be changed and upgraded and new futures are added easily than hardware changes.

10. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Achour in view of Vembu as applied to claim 15 above, and further in view of Liu et al. (US 6,252,900 B1).

Achour discloses all the claim limitations as stated above, except for a table that stores a relationship between a compunction data size and a communication mode.

Liu teaches a communication system that include table 560 that stores a relationship between communication data size (number of frames) and a communication mode (column 18, lines 12-47). It would have been obvious to one ordinary skill in the art at the time the invention was made to use a table, such as that suggested by Liu, in the system of Achour in view of Vembu in order to provide an efficient system and increase transmission speed.

Response to Arguments

11. Applicant's arguments with respect to claims 12-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SABA TSEGAYE whose telephone number is (571)272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Saba Tsegaye
Examiner
Art Unit 2419

/Saba Tsegaye/
Examiner, Art Unit 2419

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2419
12/21/08